



p21 Monoclonal Antibody

Catalog No	YP-mAb-16762
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CDKN1A
Immunogen	The antiserum was produced against synthesized peptide derived from human p21 Cip1. AA range:111-160
Specificity	p21 Monoclonal Antibody detects endogenous levels of p21 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CDKN1A;P21;CDK-interacting protein 1;CIP1;Cyclin dependent kinase inhibitor 1;Cyclin-dependent kinase inhibitor 1;CAP20;CDKN1;MDA6;PIC1;SDI1;WAF1; Melanoma differentiation-associated protein 6;MDA-6
Observed Band	21kD
Calculated Molecular Weight	21kD
Cell Pathway	Cytoplasm . Nucleus .
Tissue Specificity	Expressed in all adult tissues, with 5-fold lower levels observed in the brain.
Function	function:May be the important intermediate by which p53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression., induction:By p53, mezerein (antileukemic compound) and interferon beta., PTM:Phosphorylation of Thr-145 by Akt or of Ser-146 by PKC impairs binding to PCNA.,similarity:Belongs to the CDI family.,tissue specificity:Expressed in all adult human tissues, with 5-fold lower levels observed in the brain.,

**Background**

This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lac

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images